Public SSB Fact Sheet: Autosar (Autosar)

Projects

Exported on 12/19/2023
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### Short description/Transmitted information
- Applications, SW components, diagnostic and configuration data

### Normative document
- The standard is splitted up into several specifications: Home AUTOSAR

### Version/ Release state
- -

### Release date
- -

### Application scope
- All kinds of vehicles
- Non automotive like rail, vessels, power stations, …
- No military, hazardous applications and air crafts

### Goals
- Improve complexity management of integrated E/E architectures through increased reuse and exchangeability of SW modules between OEMs and suppliers.

### Promoting bodies
- Autosar GbR

### Type
- Autosar Standard

### IT Standard classification
- Interoperability Standard
- Integration Standard

### Data format
- Text Format (ASCII/XML)

### Additional available resources
- Use Cases, Guidelines, Best Practice, Examplesm, Standard presentation, Demonstrators, Autosar Open Conference
- see [www.autosar.org](http://www.autosar.org)

### Relevant prostep ivip project groups
- -
1 Reasons for promoting standardization (short list):

AUTOSAR (AUTomotive Open System ARchitecture) …

- is a worldwide development partnership of car manufacturers, suppliers and other companies from the electronics, semiconductor and software industry with more than 280 partner companies
- aims to improve complexity management of integrated E/E architectures through increased reuse and exchangeability of SW modules between OEMs and suppliers.
- provides the specification for a standardized SW architecture for automotive electronic control units considering configurability and scalability to different vehicle - and platform variants,
- supports safe solutions according to ASIL D (ISO26262) and provides methodology and features to implement secure solutions
- enables collaboration between various partners based on formalized, template based data exchange
- considers updates during lifetime also over the air and
- enables maintainability throughout the whole product life cycle.

- Established and proven in practice for SW- and data exchange
- AUTOSAR itself is a model based development
AUTOSAR provides its meta model for tool vendors.
2 Threats:

- Too many legal restrictions for connected vehicle use cases
- Creation of own standards in Asia in particular China
3 Consequences:

- Significant growth of costs
- Increase of quality issues

**Additional Resources**

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<tr>
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<tbody>
<tr>
<td>Fact Sheet_Autosar (Autosar).pdf³</td>
<td>März 21, 2023 by Peter Tabbert⁴</td>
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<tr>
<td>Positioning of Autosar in V-Model.png⁵</td>
<td>März 21, 2023 by Peter Tabbert⁶</td>
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<td>image2019-10-1_15-36-53.png⁷</td>
<td>März 21, 2023 by Peter Tabbert⁸</td>
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<td>image2019-10-1_15-29-42.png⁹</td>
<td>März 21, 2023 by Peter Tabbert¹⁰</td>
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⁴ [https://intranet.prostep.org/display/~petertabbert](https://intranet.prostep.org/display/~petertabbert)
⁵ [https://intranet.prostep.org/download/attachments/108855333/Positioning%20of%20Autosar%20in%20V-Model.png?api=v2](https://intranet.prostep.org/download/attachments/108855333/Positioning%20of%20Autosar%20in%20V-Model.png?api=v2)
⁶ [https://intranet.prostep.org/display/~petertabbert](https://intranet.prostep.org/display/~petertabbert)
⁸ [https://intranet.prostep.org/display/~petertabbert](https://intranet.prostep.org/display/~petertabbert)
⁹ [https://intranet.prostep.org/download/attachments/108855333/image2019-10-1_15-29-42.png?api=v2](https://intranet.prostep.org/download/attachments/108855333/image2019-10-1_15-29-42.png?api=v2)
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